

Remarks

Objections to the Specification

The specification is objected to because of an incorrect reference number in paragraph [0012]. The Applicants have amended paragraph 0012 to correct the incorrect reference number. Accordingly, the Applicants respectfully request withdrawal of the objection to the specification.

Objections to Claims 3 and 9

The Examiner has objected to claims 3 and 9 as dependent upon a rejected base claim but has indicated that these claims include allowable subject matter if they were rewritten in independent form to include all of the limitations of the base claim and any intervening claims. The Applicants respectfully request that the Examiner hold these objections in abeyance until a decision is made on whether the independent claims upon which claims 3 and 9 depend are allowable.

Rejections Under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1-2, 4-8, and 10-15 under 35 U.S.C. § 103(a) as obvious over United States patent number 5,569,889, issued to Brunner (hereinafter referred to as Brunner) in view of United States patent number 5,481,074, issued to English (hereinafter referred to as English). The Applicant respectfully requests careful consideration of the following explanation regarding the rejections of the claims.

Rejections of Claims 1-2 and 4-8 Under 35 U.S.C. § 103(a)

The amended claim 1 includes the limitations of "a button post to transmit a vertical motion of the button ***to a first side of an electrical switch***" and "an alignment post ***to register against a second side of the electrical switch***". (emphasis added) In item 3 on pages 2-3 of the office action, the Examiner seems to indicate that "alignment post" reads upon

element 126 of Brunner shown in Figures 6-8 and "electrical switch" reads upon "switch layer 148". Additionally, the Examiner seems to suggest that "button post" reads upon element 119 (the element 119 shown inside of element 126 in Figures 6-8) of Brunner shown in Figures 6-8. In column 8, lines 33-49 of Brunner it is disclosed that:

FIG. 6 is a side elevation view of a portion of a keyboard 100 comprising key assembly 112, an actuation assembly 116 and a base assembly 114. The key assembly 112 comprises a keytop 118 having a main top surface 120 against which force may be selectively manually directed to effect arcuate translation of the keytop along the arcuate axis Q as shown. The keytop 118 has a main bottom surface 128 on which is mounted a keying post 19 and a downwardly depending dome element 126 which has a vertical axis approximately coincident with the arc Q and is vertically collapsible when the keytop 118 is selectively depressed from the upper, active position shown to a lower, active position as shown in FIG. 8, wherein all parts and elements are numbered correspondingly with respect to FIG. 6, as are the corresponding parts and elements in FIG. 7, which shows the keyboard 100 portion of FIG. 6 in an inactive state, with the keytop 118 and dome element 126 in the lower, inactive position.

Referring again to FIG. 6, the keytop 118 at its rear portion 119 is coupled with the front portion 138 of pivot arm 140, the pivot arm having a rear portion 142 constructed with transversely outwardly extending flanges 144 coupled in turn to mounting bracket 146 of inverted "U" shape, as shown.

The collapsible dome element 126 is joined at its lower extremity to a lower containment ring 162 having opening 127 therein accommodating passage of keying post 19 therethrough ***when the key is depressed to the lower active position as shown in FIG. 8, so that the keying post 19 contacts the pressure-sensitive switch layer 148***, to effect inputting of data or information, in the previously described manner, via simple circuitry or other input structure associated with the switch layer 148. The substrate assembly 114 further comprises a substrate layer 150 on which the pressure-sensitive switch layer 148 is reposed, in a manner conventionally utilized in the art for

fabrication of keyboard structures. (emphasis added)

As can be understood from the section of Brunner referenced above and from Figures 6-8, element 126 and keying post 19 (labeled as element 119 in Figures 6-8) can contact switch layer 148 on the same surface of switch layer 148 as shown in Figure 7-8.

In contrast, the limitations of the amended claim 1 of recite the limitations that "a button post to transmit a vertical motion of the button to a first side of an electrical switch" and "an alignment post to register against a second side of the electrical switch". Thus, the Applicants respectfully submit that claim 1 recites limitations not disclosed in Brunner. Furthermore, the Applicants submit that English does not disclose these limitations of the amended claim 1.

As the Applicant knows the Examiner is well aware, according to MPEP 2143 "[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. ***Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.***" (emphasis added)

Because the cited sections of the prior art relied upon in making the rejection of claim 1 does not disclose all the limitations of the amended claim 1, a valid prima facie obviousness rejection of claim 1 is not present for at least this reason. Accordingly, the Applicants respectfully request withdrawal of the rejection of claim 1 under 35 U.S.C. § 103(a).

Claims 2 and 4-8 are dependent, either directly or indirectly, upon the amended claim 1 and therefore incorporate all the limitations of the amended claim 1. Because claims 2 and 4-8 are dependent upon the amended claim 1, for at least this reason, a valid prima facie obviousness rejection of claims 2 and 4-8 is not present. Accordingly, the Applicants

respectfully request withdrawal of the rejection of claims 2 and 4-8 under 35 U.S.C. § 103(a).

Rejections of Claims 8-13 Under 35 U.S.C. § 103(a)

Claim 8 has been amended to include the limitations of "a plurality of button posts, each of which is associated with a respective button and ***configured to transmit a vertical motion of the respective button to a first side of the associated electrical switch***" and "a plurality of alignment posts, each of which is associated with a respective button and ***configured to register against a second side of the associated electrical switch***". (emphasis added) As explained in detail with respect to the rejection of claim 1, the Applicants respectfully submit that neither Brunner nor English disclose these limitations of the amended claim 8. Because the cited sections of the prior art relied upon in making the rejection of claim 8 do not disclose all the limitations of the amended claim 8, a valid prima facie obviousness rejection of claim 8 is not present for at least this reason. Accordingly, the Applicants respectfully request withdrawal of the rejection of claim 8 as obvious under 35 U.S.C. § 103(a).

Claims 9-13 are dependent, either directly or indirectly upon the amended claim 8 and therefore incorporate by reference all of the limitations of the amended claim 8. For at least the reason that the amended claim 8 is not obvious, the Applicants respectfully submit that claims 9-13 are not obvious. Accordingly, the Applicants respectfully request withdrawal of the rejections of claims 9-13 as obvious under 35 U.S.C. § 103(a).

Rejections of Claim 14 Under 35 U.S.C. § 103(a)

The Applicants note that MPEP section 2181, discussing when to apply 35 U.S.C. § 112, sixth paragraph, requires that:

A claim limitation ***will be*** interpreted to invoke 35 U.S.C. 112, sixth

paragraph, if it meets the following 3-prong analysis:

(A) the claim limitations must use the phrase "**means for**" or "step for;"

(B) the "means for" or "step for" **must be modified by functional language**; and

(C) the phrase "means for" or "step for" must not be modified by sufficient structure, material or acts for achieving the specified function. (emphasis added)

The Applicants respectfully submit to the Examiner that, according to the MPEP 2181 procedure, claim 14 must be examined according to the procedure associated with 35 U.S.C. § 112, sixth paragraph.

The Applicants further note that MPEP 2183, in discussing the procedure for establishing a prima facie case of equivalence, requires that:

If the examiner finds that a prior art element

(A) performs the function specified in the claim,

(B) is not excluded by any explicit definition provided in the specification for an equivalent, and

(C) is an equivalent of the means- (or step-) plus-function limitation, **the examiner should provide an explanation and rationale in the Office action as to why the prior art element is an equivalent.** (emphasis added)

The Applicants could find no such analysis in the Examiner's office action. Therefore, it appears that the Examiner has not followed the requirements detailed in MPEP 2183 to properly establish a prima facie case of equivalence and hence a valid prima facie rejection of claim 14 has not been made. The Applicants respectfully request that the Examiner provide this analysis according to the MPEP 2183 in a non-final office action if the Examiner maintains the rejection of claim 14 so that the Applicants can make an assessment of the propriety of the Examiner's rejection of claim 14.

The Applicants note that claim 14 includes the limitations of "includes the limitations of "means for reducing lateral motion of the button". If the Examiner is asserting, as seems to be the case in item 3 on page 4 with respect to claim 14, that subject matter is disclosed in Brunner in view of English that satisfies the equivalence standards of MPEP 2183 recited above, the Applicants respectfully

disagree. The Applicants respectfully submit that the structure disclosed in the subject application that performs the function of "reducing the lateral motion" is not equivalent to the structure disclosed in Brunner that the Examiner seems to be asserting performs the recited function. A comparison of the structure of "compressible dome element 126" shown in Figures 6-8 of Brunner and of "alignment post 27" shown in Figure 2 of the subject application shows that these structures are not equivalent. Accordingly, the Applicants respectfully request withdrawal of the rejection of claim 14 under 35 U.S.C. § 103(a) for at least the reason that a valid prima facie obviousness rejection of claim 14 is not present because of the absence of equivalent structure. However, if the Examiner continues to assert that Brunner does disclose structure equivalent to the subject application that performs the recited function, the Applicants respectfully request that the Examiner provide the detailed analysis required by MPEP 2183 in establishing a prima facie case of equivalence.

Rejections of Claim 15 Under 35 U.S.C. § 103(a)

Claim 15 includes the limitations of "means for reducing dead spots of the button". As explained in detail with respect to the rejection of claim 14, the Applicants respectfully submit that this claim is required to be examined in accordance with MPEP 2181 and 2183. If the Examiner is asserting, as seems to be the case in item 3 on page 4 with respect to claim 15, that subject matter is disclosed in Brunner in view of English that satisfies the equivalence standards of MPEP 2183 recited above, the Applicants respectfully disagree. The Applicants respectfully submit that the structure disclosed in the subject application that performs the function of "reducing dead spots of the button" is not equivalent to the structure disclosed in Brunner that the Examiner seems to be asserting performs the recited function. A comparison of the structure of "compressible dome element 126" shown in Figures 6-8 of Brunner and of "alignment post 27" shown in Figure 2 of the subject application shows that these structures are not equivalent. Accordingly, the Applicants respectfully request withdrawal of the rejection of claim 15 under 35 U.S.C. § 103(a) for at least the reason that a valid

prima facie obviousness rejection of claim 15 is not present because of the absence of equivalent structure. However, if the Examiner continues to assert that Brunner does disclose structure equivalent to the subject application that performs the recited function, the Applicants respectfully request that the Examiner provide the detailed analysis required by MPEP 2183 in establishing a prima facie case of equivalence.

Conclusion

The Applicants respectfully contend that the claims are in a condition for allowance. Such allowance is respectfully requested.

Respectfully submitted,
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